

CLARK COUNTY
DEPARTMENT OF AIR QUALITY
AND ENVIRONMENTAL MANAGEMENT
500 South Grand Central Parkway, Box 555210, Las Vegas, Nevada 89155
Part 70 Operating Permit
Source: 7

Issued in accordance with the
Clark County Air Quality Regulations (AQR)

ISSUED TO: NEVADA POWER COMPANY
CLARK GENERATING STATION

SOURCE LOCATION:

5640 Stephanie St.
Las Vegas, NV 89122
T21S, R62E, S28
Hydrographic Basin Number: 212

COMPANY ADDRESS:

P.O. Box 98910, MS # 30
Las Vegas, NV 89151-0001

NATURE OF BUSINESS:

SIC Code: 4911 – Electric Services
NAICS Code: 221112 – Fossil Fuel Electric Power Generation

RESPONSIBLE OFFICIAL:

Name: Kevin Geraghty
Title: Vice President, Generation, Nevada Energy
Phone: (702) 402-5662
Fax Number: (702) 402-0835

Permit Issuance Date:

Expiration Date:

**ISSUED BY: CLARK COUNTY DEPARTMENT OF AIR QUALITY AND ENVIRONMENTAL
MANAGEMENT**

Tina Gingras
Assistant Director, DAQEM

EXECUTIVE SUMMARY

Clark Station is located at 5640 Stephanie St., Las Vegas, Nevada, 89122, in the Las Vegas Valley airshed, hydrographic basin number 212, in Township 21S, Range 62E, Section 28. Hydrographic basin 212 is nonattainment for CO, PM₁₀, and ozone (8-hour), and attainment for all other regulated air pollutants. The source is major for PM₁₀, NO_x, CO, VOC, and a TCS (NH₃) and a minor source for HAP emissions. The PTE for NH₃, listed as a TCS, is from the 12 peaker turbines (EUs: A27 through A38), currently permitted by an NSR ATC (ATC/OP 00007 Modification 4 Revision 1 (03/20/07)). No conditions for these units are included in this Part 70 Operating Permit, as these units will be included in a future Title V Revision.

DAQEM has Title V permitting responsibilities for the five combustion gas turbines (known as Turbine Units 4 through 8), two cooling towers, and ancillary equipment at the source. The permitting history of this source reflects the changes in air quality permitting practices both at the local and federal levels in response to changing environmental regulations. This is a revision and renewal of the Part 70 Operating Permit for this source. The fuel oil burning option is being removed from Turbine Units 5 through 8. Consent Decree requirements pertaining to the Ultra Low NO_x Burners (ULNB) are also being added.

All generating and support processes at the site are grouped under SIC 4911 – Electric Services (NAICS: 22111 - Electric Power Generation).

The following table summarizes the source potential to emit for each regulated air pollutant from all emission units for which an ATC has been issued. These PTE values are not source emission limits but are used to determine the major source status for each pollutant.

Pollutant	PM ₁₀	NO _x	CO	SO _x	VOC	HAP	TCS
Tons/year	792.46	2,465.93	1,850.93	48.50	216.50	7.27	85.44

The following table summarizes the source PTE for each regulated air pollutant for all emission units addressed by this Part 70 operating permit. These emission rates are for reference purposes only and are not intended to be enforced by direct measurement unless otherwise noted in Section III of this permit.

Pollutant	PM ₁₀	NO _x	CO	SO _x	VOC	HAP	TCS
Tons/year	683.23	2,092.93	1,712.00	36.35	182.13	5.45	0.00
Major Source Thresholds	70	50	70	100	50	10/25 ¹	1.0

¹Ten tons for any individual HAP or 25 tons for combination of all HAPs.

All general and specific conditions in the permit are federally enforceable unless explicitly denoted otherwise. [AQR 19.4.2]

PROPOSED

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I. ACRONYMS

Table I-1: List of Acronyms

Acronym	Term
AQR	Clark County Air Quality Regulations
AST	Aboveground Storage Tank
ATC	Authority to Construct
ATC/OP	Authority to Construct/Operating Permit
CAAA	Clean Air Act, as amended, or Clean Air Act Amendments
CE	Control Efficiency
CEMS	Continuous Emissions Monitoring System
CF	Control Factor
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
CPI	Urban Consumer Price Index
DAHS	Data Acquisition and Handling System
DAQEM	Clark County Department of Air Quality & Environmental Management
DEM	Digital Elevation Model
EF	Emission Factor
EO	Executive Order
EPA	United States Environmental Protection Agency
EU	Emission Unit
HAP	Hazardous Air Pollutant
HP	Horse Power
HRSG	Heat Recovery Steam Generating Unit
MMBtu	Millions of British Thermal Units
NEI	Net Emission Increase
NL	No Limit
NO _x	Nitrogen Oxides
NOV	Notice of Violation
NRS	Nevada Revised Statutes
NSPS	New Source Performance Standards
NSR	New Source Review
OP	Operating Permit
PM ₁₀	Particulate Matter less than 10 microns
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RATA	Relative Accuracy Test Audit
scf	Standard Cubic Feet
SIP	State Implementation Plan
SO _x	Sulfur Oxides
TCS	Toxic Chemical Substance
TDS	Total Dissolved Solids
TSD	Technical Support Document
ULNB	Ultra Low NO _x Burner
VOC	Volatile Organic Compound

II. GENERAL CONDITIONS

A. GENERAL REQUIREMENTS

1. The Permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Air Act (Act) and is grounds for enforcement action; for permit termination, revocation and reissuance or modification; or for denial of a permit renewal application. [AQR 19.4.1.6.a]
2. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid. [AQR 19.4.1.5]
3. The Permittee shall pay all permit fees pursuant to AQR Section 18. Failure to pay Part 70 permit fees may result in citations or suspensions or revocation of the Part 70 Permit. [AQR 19.4.1.7]
4. The permit does not convey any property rights of any sort, or any exclusive privilege. [AQR 19.4.1.6.d]
5. The Permittee shall not hinder, obstruct, delay, resist, interfere with, or attempt to interfere with the Control Officer, or any individual to whom authority has been duly delegated for the performance of any duty by the AQR. [AQR 5.1]
6. The Permittee owning, operating, or in control of any equipment or property who shall cause, permit, or participate in any violation of the AQR shall be individually and collectively liable to any penalty or punishment imposed by and under the AQR. [AQR 8.1]
7. The Permittee shall continue to comply with applicable requirements for which the Permittee is in compliance. [AQR 19.3.3.8.b]
8. Any Permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. [AQR 19.3.2]
9. The Permittee may request confidential treatment of any records in accordance with AQR Section 19. Emission data, standards or limitations [all terms as defined in 40 CFR 2.301(a)] or other information as specified in 40 CFR 2.301 shall not be considered eligible for confidential treatment. The Administrator and the Control Officer shall each retain the authority to determine whether information is eligible for confidential treatment on a case-by-case basis. [AQR 19.3.1.3 and 40 CFR 2.301]

B. MODIFICATION, REVISION, RENEWAL REQUIREMENTS

1. The Permittee shall not make a modification, as defined in AQR Section 0, to the existing source prior to receiving an Authority to Construct (ATC) from the Control Officer. [AQR 12.1.1.1]
2. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the Permittee for the permit modification, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [AQR 19.4.1.6.c]
3. Any request for a permit revision must comply with the requirements of AQR Section 19. [AQR 19.5.5.1]
4. The Permittee shall not build, erect, install or use any article, machine, equipment or process, the use of which conceals an emission, which would otherwise constitute a violation of an applicable requirement. [AQR 80.1 and 40 CFR 60.12]
5. No permit revisions shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit, provided the Source conforms to the applicable requirements of AQR Sections 12 and 58. [AQR 19.4.1.11]
6. For purposes of permit renewal, the Permittee shall submit a timely and complete application. A timely application is one submitted between six (6) months and 18 months prior to the date of permit expiration. [AQR 19.3.1.1.c]
7. Permit expiration terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted consistent with AQR Subsections 19.3.1.1.c and 19.5.2 in which case the permit shall not expire and all terms and conditions of the permit shall remain in effect until the renewal permit has been issued or denied. [AQR 19.5.3.2]

C. REPORTING/NOTIFICATIONS/PROVIDING INFORMATION REQUIREMENTS

1. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [AQR 19.4.1.6.e]
2. The Permittee shall allow the Control Officer or an authorized representative, upon presentation of credentials:
 - a. entry upon the Permittee's premises where the source is located, or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

- b. access to inspect and copy, at reasonable times, any records that must be kept under conditions of the permit;
 - c. access to inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. access to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [AQR 4.3 and 19.4.3.2]
3. Upon request of the Control Officer, the Permittee shall provide such information or analyses as will disclose the nature, extent, quantity or degree of air contaminants which are or may be discharged by such source, and type or nature of control equipment in use, and the Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to such report, the Control Officer may designate an authorized agent to make an independent study and report as to the nature, extent, quantity or degree of any air contaminants which are or may be discharged from source. An authorized agent so designated is authorized to inspect any article, machine, equipment, or other contrivance necessary to make the inspection and report. [AQR 4.4]

D. COMPLIANCE REQUIREMENTS

1. The Permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit. [AQR 19.4.1.6.b]
2. Any person who violates any provision of this operating permit, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry or monitoring activities or any requirements by DAQEM is guilty of a civil offense and shall pay civil penalty levied by the Air Pollution Control Hearing Board/Hearing Officer of not more than \$10,000. Each day of violation constitutes a separate offense. [AQR 9.1]
3. Any person aggrieved by an order issued pursuant to AQR 9.1 is entitled to review as provided in Chapter 233B of Nevada Revised Statutes (NRS). [AQR 9.12]
4. The Permittee shall comply with the requirements of 40 CFR 61, Subpart M, of the National Emission Standard for Asbestos for all demolition and renovation projects. [AQR 13.1.7]
5. Requirements for compliance certification with terms and conditions contained in the operating permit, including emission limitations, standards, or work practices, are as follows:

- a. the Permittee shall submit compliance certifications annually in writing to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) and the Administrator at USEPA Region IX (Director, Air and Toxics Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for the previous calendar year will be due on January 30 of each year;
 - b. compliance shall be determined in accordance with the requirements detailed in AQR 19.4.1.3, record of periodic monitoring, or any credible evidence; and
 - c. the compliance certification shall include:
 - i. identification of each term or condition of the permit that is the basis of the certification;
 - ii. the Permittee's compliance status and whether compliance was continuous or intermittent;
 - iii. methods used in determining the compliance status of the source currently and over the reporting period consistent with Subsection 19.4.1.3; and
 - iv. other specific information required by the Control Officer to determine the compliance status of the source. [AQR 19.4.3.5]
6. The Permittee shall promptly report to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) deviations from permit requirements as soon as practicable but not to exceed ten (10) calendar days of the deviation, including those attributable to upset conditions. Such reporting shall include the probable cause of such deviations and any corrective actions or preventative measures taken. [AQR 19.4.1.3]
7. The Permittee shall report to the Control Officer any upset, breakdown, malfunction or emergency, as defined in Section 0, which cause emissions of regulated air pollutants in excess of any limits set by regulation or by this permit, within one (1) hour of the onset of the event. This report shall be communicated by phone (702) 455-5942, or by fax (702) 383-9994. [AQR 25.2]
8. The Permittee shall include a certification of truth, accuracy, and completeness by a responsible official when submitting any application form, report, or compliance certification pursuant to this operating permit. This certification and any other certification required shall state, "Based on the information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." This statement shall be followed by the signature and printed name of the responsible official certifying compliance and the date of signature. [AQR 19.3.4]

E. PERFORMANCE TESTING REQUIREMENTS

1. Upon request of the Control Officer, the Permittee shall test or have tests performed to determine the emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of that allowed by the DAQEM regulations is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. The Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) shall be given a copy of the test results in writing and signed by the person responsible for the tests. [AQR 4.5]
2. Upon request of the Control Officer, the Permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. [AQR 4.6]
3. The Permittee shall submit for approval a performance testing protocol which contains testing, reporting, and notification schedules, test protocols, and anticipated test dates to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) not less than 45 nor more than 90 days prior to the anticipated date of the performance test. [AQR 14.10]
4. The Permittee shall provide all requests for any alternative test methods to EPA for approval. [AQR 14.1 and 40 CFR 60.8(b)]
5. The Permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days from the end of the performance test. [AQR 14.12]
6. Pursuant to AQR Section 10, the Permittee of any stationary source or emission unit that fails to demonstrate compliance with the emissions standards or limitations during any subsequent performance test shall submit a compliance plan to the Control Officer within 90 days from the end of the performance test. [AQR 10.1]
7. The Control Officer may require additional or more frequent performance testing. [AQR 4.5]

III. EMISSION UNITS AND APPLICABLE REQUIREMENTS

A. EMISSION UNITS

The stationary source covered by this Part 70 OP is defined to consist of the emission units and associated appurtenances summarized in Table III-A-1. [AQR 19.2.1 and 19.3.3.3]

TABLE III-A-1: List of Emission Units

EU	Description	SCC
A00704D	General Electric 7B (7000), Simple Cycle Combustion Turbine with 60 MW Nominal Output; Turbine Unit 4. MEQ = 60 MW	20100201
A00701A	Westinghouse 501B5 with B6 upgrade, Combined Cycle Combustion Turbine with 85 MW Nominal Output; No Supplemental Duct-firing; Turbine Unit 5. MEQ = 85 MW	20100201
A00702B	Westinghouse 501B5 with B6 upgrade, Combined Cycle Combustion Turbine with 85 MW Nominal Output; No Supplemental Duct-firing; Turbine Unit 6. MEQ = 85 MW	20100201
A00705	Westinghouse 501B5 with B6 upgrade, Combined Cycle Combustion Turbine with 85 MW Nominal Output; No Supplemental Duct-firing; Turbine Unit 7. MEQ = 85 MW	20100201
A00708	Westinghouse 501B5 with B6 upgrade, Combined Cycle Combustion Turbine with 85 MW Nominal Output; No Supplemental Duct-firing; Turbine Unit 8. MEQ = 85 MW	20100201
A00709	Lime Silo, 3,700 cubic feet.	30501613
A00710	Soda Ash Silo (A), 4,160 cubic feet.	30102122
A00711	Soda Ash Silo (B), 4,160 cubic feet.	30102122
A00712	Cooling Tower for Unit 9 Steam Turbine Generator Associated with Turbine Units 7 and 8 (EUs: A00705 & A00708) 53,000 gpm	38500110
A00713	Cooling Tower for Unit 10 Steam Turbine Generator Associated with Turbine Units 5 and 6 (EUs: A00701A & A00702B) 53,000 gpm	38500110
A21	Kohler Diesel Emergency Generator; M/N: N/A; 250 kW, 335.1 hp	20200102
A22	Onan Diesel Emergency Generator; M/N: N/A; 250 kW, 335.1 hp	20200102
A23	Diesel Emergency Fire Pump; M/N: N/A; 235 kW, 315 hp	20200102
A43	One Gasoline Dispensing Operation, Consisting of a 1,200 gallon aboveground storage tank and One Product Nozzle, Storing Regular Unleaded Gasoline	40600306

B. EMISSION LIMITATIONS AND STANDARDS

1. Emission Limits

- a. The Permittee shall allow neither the actual nor the allowable emissions from each emission unit to exceed the calculated PTE listed below in Tables III-B-1 and III-B-2. Pound-per-hour, ppm, and pound-per-MMBtu limits in Table III-B-1 are normal operation limits only (exclude periods of startup and shutdown of the combustion turbines). Ton-per-year emission limits of each emission unit

- include startup and shutdown emissions. *[AQR 12.8.19(a) and NSR ATC/OP 00007, Modification 4 Revision 1, (03/20/07)]*
- b. The Permittee shall limit the NO_x emissions for Units 7 and 8 to 0.34 pounds per million Btu prior to ULNB installation, excluding periods of startup/shutdown. *[EPA NV-78-01 Condition VIII-E, (10/01/79)]*
 - c. For calendar year 2009 only, Turbine Units 5 and 8 have a combined NO_x emission limit of 180 tons. *[Consent Decree Number 2:07-cv-00771]*

PROPOSED

TABLE III-B-1: Source Potential to Emit, All Turbines on Natural Gas, 8,760 Hours per Year with Ancillary Equipment¹

EU	PM ₁₀		NO _x				CO			SO ₂		VOC	
	lbs/hr	tons/yr	@15% O ₂ ppm	lbs/MMBtu	lbs/hr	tons/yr	lbs/MMBtu	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
A00704D	--	165.4	NL	NL	NL	1,732.6	NL	NL	433.1	NL	7.9	NL	94.5
A00701A	24.4	106.9	5	0.02	19.91	360 ²	0.08	50.00	319.7	1.62	7.1	5.0	21.9
A00702B	24.4	106.9	5	0.02	19.91		0.08	50.00	319.7	1.62	7.1	5.0	21.9
A00705	24.4	106.9	5	0.02	19.91		0.08	50.00	319.7	1.62	7.1	5.0	21.9
A00708	24.4	106.9	5	0.02	19.91		0.08	50.00	319.7	1.62	7.1	5.0	21.9
A00709	NL	8.6	--	--	--	--	--	--	--	--	--	--	--
A00710	NL	8.6	--	--	--	--	--	--	--	--	--	--	--
A00711	NL	8.6	--	--	--	--	--	--	--	--	--	--	--
A00712	NL	32.2	--	--	--	--	--	--	--	--	--	--	--
A00713	NL	32.2	--	--	--	--	--	--	--	--	--	--	--
A21	NL	0.01	--	--	NL	0.10	--	NL	0.02	NL	0.01	NL	0.01
A22	NL	0.01	--	--	NL	0.10	--	NL	0.02	NL	0.01	NL	0.01
A23	NL	0.01	--	--	NL	0.13	--	NL	0.06	NL	0.02	NL	0.01

¹Tons/yr emissions include Startup and Shutdowns for the Turbine Units (EUs: A00704D, A00701A, A00702B, A00705, and A00708), the lbs/hr PTE does not include Startup and Shutdown emissions.

²The consent decree defines long term NO_x emission limits for Turbine Units 5 through 8 combined. For calendar year 2009 only, Turbine Units 5 and 8 have a combined NO_x emission limit of 180 tons.

- d. The Permittee shall not exceed the annual HAP emission limits for each emission unit or the source limit as listed in Table III-B-2. *[Authority: NSR ATC/OP 00007, Modification 4 Revision 1, (03/20/07)]*

Table III-B-2: Source-Wide HAP Emissions (tons per year)

HAP	Unit 4 (EU: A00704D) ^{1,2}	Per Each Turbine Unit 5-8 (EUs: A00701A, A00702B, A00705 A00708) ^{1,2,3}	Per Each of Two 250 kW Generators (EUs: A21 and A22) ⁴	Existing Fire Pump (EU: A23)	Total for Gasoline Storage Tank (EU: A43) ⁵	Total for All Units
1,3-Butadiene	1.88E-03	2.26E-03	1.19E-06	1.12E-06	--	4.14E-03
Acetaldehyde	1.75E-01	2.10E-01	2.34E-05	2.20E-05	--	3.85E-01
Acrolein	2.80E-02	3.36E-02	2.82E-06	2.65E-06	--	6.16E-02
Arsenic	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Manganese	--	--	--	--	--	--
Formaldehyde	6.69E-02	8.04E-02	3.60E-05	3.38E-05	--	1.47E-01
Mercury	--	--	--	--	--	--
Nickel	--	--	--	--	--	--
Benzene	5.68E-03	6.83E-03	2.85E-05	2.67E-05	2.38E-04	1.28E-02
Ethyl Benzene	1.40E-01	1.68E-01	--	--	2.17E-05	3.08E-01
Selenium	--	--	--	--	--	--
Naphthalene	5.68E-03	6.83E-03	--	--	--	1.25E-02
Toluene	9.18E-02	1.10E-01	1.25E-05	1.17E-05	1.30E-04	2.02E-01
Propylene Oxide	1.27E-01	1.52E-01	7.85E-05	7.40E-05	--	2.79E-01
Xylenes	2.80E-01	3.36E-01	8.70E-06	8.17E-06	4.33E-05	6.16E-01
PAHs	9.62E-03	1.16E-02	5.10E-06	4.82E-06	--	2.12E-02
Total Per Unit	0.93	1.12	0.01	0.01	0.01	--

¹Formaldehyde, benzene and toluene emissions factors from Gas-Fired Boiler and Turbine Air Toxics Summary Report, prepared by Carnot Technical Services, Tustin, CA, for the Gas Research Institute and the Electric Power Research Institute, August 1996; Remaining emission factors from AP-42 Section 3.1 Stationary Gas Turbines, Table 3.1-3.

²Based on HHV heat inputs of 997.9 (Unit 4) and 1,199.9 (Units 5-8 gas).

³Emission factors from AP-42, Volume 1, Chapter 3, Tables 3.1-4 and 3.1-5, Supplement F.

⁴Emission factors from AP-42 Volume 1, Section 3, Table 3.3-2, Supplement F.

⁵Not a federally enforceable limit; value is an estimate for informational purposes only.

- e. The Permittee shall not discharge into the atmosphere, from any single source, any air contaminants for of such opacity to a degree equal to 20 percent obscuration or greater for a period of more than 6 consecutive minutes. [AQR 26.1.1]
- f. The emission units shall not exceed the PTE listed in Tables III-B-1 through IIIB-5 and Table III-B-7. The emission limits in Tables III-B-4 and III-B-5 are normal operation limits only (exclude periods of startup and shutdown of the combustion turbines) and shall not apply to NO_x if the criteria in Condition III-B-1-g are met. Emission limits of Table III-B-3 include startup and shutdown emissions. [AQR 12.8.19(a), NSR ATC/OP 00007, Modification 4 Revision 1, (03/20/07), and NSR ATC/OP 00007, Modification 5, Section III-B (10/01/08)]
- g. The Permittee shall limit the Turbine Units 5 through 8 to a 5 ppm NO_x emission rate during all periods of operation except startup, shutdown, or when all of the following are met:
 - i. Either:
 - (I) rapid combustion turbine load changes due to activation of the Automatic Safety or Equipment Protection Systems which rapidly decrease turbine load; or
 - (II) a change in the combustion mode of the ULNBs triggered by the Automatic Safety or Equipment Protection Systems;
 - ii. when the 1-hour average NO_x emissions above the 5 ppm NO_x emission rate did not occur as a result of operator neglect; improper operation or maintenance; or the tampering with, interfering with, altering, or adjusting any equipment in any way which conceals or disguises the type and quantity of emission;
 - iii. when the operating conditions described in III-B-1-f-i(I) or (II) are recorded in the plant's operating log within 24 hours of the event, and in the CEMS by 5 pm the next business day following the event. The notations in the log and CEMS must describe the data, list the time of entry into the log, and describe the plant operating conditions responsible for the event;
 - iv. when the 1-hour average NO_x concentration does not exceed 32 ppm, when calculated by the method described in III-C-5; and
 - v. within thirty (30) calendar days of the event, the Permittee files a report with the EPA and Department of Justice that sets forth the information that demonstrates the applicability to the event of conditions III-B-1-f-i through iv.
- h. The conditions of III-B-1-g shall apply to no more than ten (10) 1-hour averages of NO_x emissions per Turbine Unit per calendar year. The Permittee's shall demonstrate that it has met the conditions of III-B-1-f. All NO_x emission during these 1-hour periods covered by III-B-1-f shall be included when calculating the annual NO_x tonnage.

Table III-B-3: PTE of Modified Turbine Units 5 through 8, Including Startup and Shutdowns after ULNB Installation¹

EU	PM ₁₀ (tpy)	NO _x (tpy)	CO (tpy)	SO ₂ (tpy)	VOC (tpy)
A00701A	106.90	360.00 ²	319.70	7.10	21.90
A00702B	106.90		319.70	7.10	21.90
A00705	106.90		319.70	7.10	21.90
A00708	106.90		319.70	7.10	21.90

¹NO_x emission limits are based on the consent decree limit of 5 ppm with ULNB. SO₂ limits are based on natural gas sulfur content limit of 0.5 grains/100 dscf.

²The consent decree defines long term NO_x emission limits for Turbine Units 5-8 combined. For calendar year 2009 only, Turbine Units 5 and 8 have a combined NO_x emission limit of 180 tons.

Table III-B-4: Emission Rates for Turbine Units 5 through 8, Normal Operations, after ULNB Installation

EU	NO _x ppm ¹	lbs NO _x per MMBtu ²	lbs CO per MMBtu
A00701A	5.0	0.02	0.08
A00702B	5.0	0.02	0.08
A00705	5.0	0.02	0.08
A00708	5.0	0.02	0.08

¹At 15% O₂ on a one-hour average.

²NO_x EF = (5 ppm/1,000,000)*(1 lb mol/385.3 dscf)*(46.01 lb NO₂/lb mol)*(8,710 dscf/mmBtu)*(20.9/20.9-15)

Table III-B-5: Short-Term PTE, Excluding Start up and Shutdowns, for Turbine Units 5 through 8, after ULNB Installation

EU	PM ₁₀ (lbs/hr)	NO _x (lbs/hr)	CO (lbs/hr)	SO ₂ ¹ (lbs/hr)	VOC ¹ (lbs/hr)
A00701A	24.40	19.91	50.00	1.62	5.00
A00702B	24.40	19.91	50.00	1.62	5.00
A00705	24.40	19.91	50.00	1.62	5.00
A00708	24.40	19.91	50.00	1.62	5.00

¹These short-term emission limits are not federally enforceable.

Table III-B-6: Startup/Shutdown PTE per Turbine Unit for Units 5 through 8 after ULNB Installation

EU	PM ₁₀ (lbs/event)	NO _x (lbs/event)	CO (lbs/event)	SO ₂ (lbs/event)	VOC (lbs/event)
Hot Startup	24.40	140.00	800.00	8.00	5.00
Cold Startup	48.80	325.00	1,700.00	16.00	10.00
Shutdown	24.40	165.00	1,200.00	8.00	5.00

Note: Not federally enforceable limits; values are estimates for informational purposes only.

Table III-B-7: Emission Rates for Turbine Units 5 through 8, Allowable Exceedences, after ULNB Installation¹

EU	NO _x ppm ²	lbs NO _x per MMBtu ³
A00701A	32.0	0.12
A00702B	32.0	0.12

EU	NO _x ppm ²	lbs NO _x per MMBtu ³
A00705	32.0	0.12
A00708	32.0	0.12

¹Allowable exceedences are subject to the requirements of Condition III-B-1-f.

²At 15% O₂ on a one-hour average.

³NO_x EF = (32 ppm/1,000,000)*(1 lb mol/385.3 dscf)*(46.01 lb NO₂/lb mol)*(8,710 dscf/mmBtu)*(20.9/20.9-15)

- i. Turbine Units 5 through 8 (EUs: A00701A, A00702B, A00705 and A00708) are subject to all requirements and limits listed in 40 CFR 60 Subpart A and Subpart GG. The NO_x limitation under Subpart GG is based on the formula provided in 40 CFR 60.332(a)(1).
- j. The Permittee shall not emit NO_x from Turbine Units 5 and 8 in an amount greater than 180 tons from January 1, 2009, through December 31, 2009. The Permittee shall include the pollutants emitted during all periods of operation during the year, including during startup and shutdown. The Permittee shall not use NO_x Allowances to comply with the 180 ton NO_x limit. *[Consent Decree Condition IV-C-38-a, (06/13/07)]*
- k. Beginning January 1, 2010, the Permittee shall not emit NO_x from Turbine Units 5 through 8 in an amount greater than 360 tons per calendar year. The Permittee shall include the pollutants emitted during all periods of operation during the year, including during startup and shutdown. The Permittee shall not use NO_x Allowances to comply with the 360 ton NO_x limit. *[Consent Decree Condition IV-C-38-a, (06/13/07)]*

2. Production Limitations

- a. For Turbine Unit 4, a startup period is defined as the one-hour period immediately following the beginning of the combustion of fuel. A shutdown period is defined as the period of no more than one hour that immediately precedes the cessation of fuel combustion. *[NSR ATC/OP 00007, Modification 4 Revision 1, Condition III-B-4, (03/20/07)]*
- b. The Permittee shall limit the throughput of the lime silo (EU: A00709) to 8,640 tons per rolling 12-month period. *[NSR ATC/OP 00007, Modification 4 Revision 1, Condition III-A-7 (03/20/07)]*
- c. The Permittee shall limit the throughput of each of the soda ash silos (EUs: A00710 and A00711) to 8,640 tons per rolling 12-month period. *[NSR ATC/OP 00007, Modification 4 Revision 1, Condition III-A-8 (03/20/07)]*
- d. The Permittee shall limit the maximum water flow in each cooling tower to 53,000 gallons per minute and the TDS to 12,000 ppm on a 30-day rolling average (EUs: A00712 and A00713). *[NSR ATC/OP 00007, Modification 4 Revision 1, Conditions III-A-6 and III-B-7. (03/20/07)]*
- e. The Permittee shall limit the operation of the Kohler 250 kW, 335 hp emergency generator, Onan 250 kW, 335 hp emergency generator, and the 235 kW, 315 hp fire pump (Emission Units A21, A22, and A23) to 26 hours per

rolling 12-month period each for testing and maintenance purposes. There are no restrictions for operating during emergencies as defined in AQR Section 0. [NSR ATC/OP 00007, Modification 4 Revision 1, Condition III-A-4 (03/20/07)]

- f. The Permittee shall limit the monthly throughput of the GDO at this source (EUs: A43 and A44) to less than 10,000 gallons of gasoline. [40 CFR 63.11111]

3. Emission Controls

- a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected source including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
- b. Turbine Units 5 through 8 are subject to all requirements and limits listed in 40 CFR 60 Subpart A and Subpart GG. By meeting the following conditions, the Permittee is in compliance with these requirements [NSR ATC/OP 00007, Modification 4 Revision 1, Condition III-B-2. (03/20/07)]:
 - i. The Permittee shall use only natural gas in the combustion turbine units at the source. [Consent Decree Condition IV-B-33, (06/13/07)]
 - ii. Sulfur content of natural gas fuel shall not exceed 0.5 grains per 100 dscf as determined by annual verification. [40 CFR 75, Appendix D]
 - iii. The Permittee shall meet the NO_x limitation under Subpart GG that is based on the formula provided in 40 CFR 60.332(a)(1).
- c. After installation of the ULNB, the Permittee shall cease using water injection for NO_x control. [Consent Decree Condition IV-A-28, (06/13/07)]
- d. Per manufacturer's recommendations or good operating practice, the Permittee shall control PM₁₀ exhaust emissions from each simple cycle system by properly maintaining and periodically replacing inlet air filters preceding each turbine. [NSR ATC/OP 00007, Modification 4 Revision 1, Condition III-B-19, (03/20/07)]
- e. The Permittee shall ensure that the baghouse on the lime silo and soda ash silos is in operation during the silo loading. The Permittee shall ensure that the baghouse operates at a minimum of 99.9 percent efficiency at all times. [NSR ATC/OP 00007, Modification 4 Revision 1, Condition III-B-9 (03/20/07)]
- f. The Permittee shall ensure that drift eliminators are installed on the wet cooling towers with a maximum drift rate of 0.002 percent, based on manufacturer's specifications. [NSR ATC/OP 00007, Modification 4 Revision 1, Condition III-B-7. (03/20/07)]

- g. The Permittee shall burn only low sulfur (<0.05 percent) diesel fuel in the emergency generators and fire pump. *[NSR ATC/OP 00007, Modification 4 Revision 1, Conditions III-A-4, III-A-5 and III-B-10 (03/20/07)]*
- h. Beginning January 10, 2011, the Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to the following:
 - i. minimize gasoline spills;
 - ii. clean up spills as expeditiously as practicable;
 - iii. cover all open gasoline containers and all storage tank fill-pipes with a gasketed seal when not in use; and
 - iv. minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. *[40 CFR 63.11116]*
- i. Pursuant to AQR Section 43, this source shall be operated in a manner such that odors will not cause a nuisance. (Locally enforceable only). *[NSR ATC/OP 00007, Modification 4 Revision 1, Condition I-14. (03/20/07)]*

C. MONITORING

- 1. The Permittee shall comply with all applicable monitoring requirements of 40 CFR 60 Subparts A and GG and 40 CFR 63 Subpart CCCCCC by maintaining CEMS on Turbine Units 5 through 8 and maintaining records of gasoline throughput. *[NSR ATC/OP 00007, Modification 4 Revision 1, Condition III-C-1, (03/20/07) and AQR 19]*
- 2. To demonstrate continued direct compliance with operational limitations and the hourly, and/or annual emissions limitations for NO_x and CO specified in Section III of this permit, the Permittee shall ensure that CEMS are calibrated, maintained, and operated on Turbine Units 5 through 8 to monitor and record the following parameters for each individual turbine unit:
 - a. hours of operation;
 - b. fuel consumption;
 - c. hours of downtime of the CEMS;
 - d. exhaust gas flow rate (by direct or indirect methods);
 - e. exhaust gas concentration of NO_x, CO and O₂;
 - f. one hour average NO_x concentration; and
 - g. hourly and 12-month rolling accumulated mass emissions of NO_x and CO. *[AQR 19.4.1.3(a)]*

3. The Quality Assurance Plan for all CEMS required by this permit has been submitted to and accepted by the Control Officer. This QA plan is binding and consistent with the regulations. The QA Plan contains auditing schedules, reporting schedules, and design specifications for the CEMS system. The CEMS shall conform to all provisions of 40 CFR 60.13 and 40 CFR 60 Subpart GG. Audit procedures shall conform to the provisions of 40 CFR 60 Appendix F. [AQR 19.4.1.3(a)]
4. In determining the NO_x emission concentration on a one-hour average, the Permittee shall use CEMS in accordance with the applicable reference methods specified in 40 CFR 60 to calculate emission for each 15-minute interval within each clock hour, except as provided in this condition. Compliance with the 5 ppm NO_x emission rate shall be shown, by the Permittee, by averaging all 15-minute CEMS interval readings within a clock hour, except that any 15-minute CEMS interval that contains any part of a start up or shutdown shall not be included in the calculation of that 1-hour average. A minimum of two 15-minute CEMS interval readings within a clock hour, not including start up or shutdown intervals, is required to determine compliance with the 5 ppm NO_x emission rate, on a 1-hour average. [Consent Decree Condition IV-B-31, (06/13/07)]
5. The Permittee shall report all startup and shutdown emissions as recorded by CEMS. A startup period for Turbine Units 5 through 8 (EUs: A00701A, A00702B, A00705 and A00708) is defined as the one hour period immediately following the beginning of the combustion of fuel, except during a Cold Steam Turbine Start up of a unit operating in combined cycle mode. Cold Steam Turbine Start up means the start-up of a power block when the steam turbine first stage base metal temperatures are below 250 degrees F. A Cold Steam Turbine Start up is defined as the two hour period immediately following the beginning of the combustion of fuel in the first unit to start in that power block. A shutdown period is defined as the period of no more than one hour that immediately precedes the cessation of fuel combustion.
6. The Permittee shall continue to monitor the TDS in the cooling tower circulating water daily when operating using a method approved by DAQEM. [AQR 19.4.1.3(a)]
7. The Permittee shall perform at least one visual emissions observation on a plant-wide level each calendar quarter. Quarterly visual observations shall include the diesel-fired emergency generators and fire pump (EUs: A21, A22, and A23) while operating, not necessarily simultaneously, to demonstrate compliance with the opacity limit. If any of the diesel-fired emergency generators or fire pump does not operate during the calendar quarter, then no observation of that unit shall be required. If visible emissions are observed, then corrective actions shall be taken to minimize the emissions and, if practicable, the opacity of emissions shall be visually determined in accordance with 40 CFR 60 Appendix A: Reference Method 9. [AQR 19.4.1.3(a) and 40 CFR 70.6]

D. TESTING

1. Turbine Unit 4 (EU: A00704D) has no enforceable short-term limitations. Turbine 4 shall be performance tested for NO_x and CO as a demonstration of compliance with its annual emission limitations within 180 days after operating more than 500 hours in any calendar year. Table III-D-1 summarizes NO_x and CO performance test methods and frequency for Turbine Unit 4. [AQR 19.4.3.1]

Table III-D-1: Performance Testing Requirements for Turbine Unit 4

Test Point	Pollutant	Method (40 CFR 60, Appendix A)	Frequency
Turbine/HRSG Exhaust Stack	NO _x	Chemiluminescence Analyzer (EPA Method 7E)	Within 180 days after operating more than 500 hours in any calendar year
Turbine/HRSG Exhaust Stack	CO	EPA Method 10 analyzer	
Stack Gas Parameters	---	EPA Methods 1, 2, 3, 4	

2. The Permittee shall comply with all applicable performance testing requirements of 40 CFR 60 Subparts A and GG by complying with the performance testing requirement listed in Table III-D-2. [NSR ATC/OP 00007, Modification 4 Revision 1, Condition III-D-1, (03/20/07)]
3. Initial performance tests for Turbine Units 5 through 8 were conducted. To demonstrate continued compliance with the emissions limitations specified in Section III, the Permittee shall continue to conduct performance tests on Turbine Units 5 through 8 for NO_x, CO, VOCs, and PM₁₀ once every five years, (except Turbine Unit 7), with the next series of tests due for each turbine unit within five years of the last performance test. [AQR 19.4.3.1 and NSR ATC/OP A0007, Modification 3, Condition III-E-1 (10/30/03)]
4. Performance testing for particulate matter must be conducted annually on Unit 7 and the results reported in accordance with the methods set forth in 40 CFR 60.8 and 40 CFR 60 Appendix A. The EPA shall be notified at least 30 days in advance of such tests to allow an observer to be present. Equivalent test methods may be used if approved by the EPA. [Authority: PSD permit NV 78-01, Condition VIII-D-2, (10/01/79)]
5. Table III-D-2 summarizes VOC, PM₁₀, NO_x, and CO performance test methods for Turbine Units 5 through 8. [AQR 19.4.3.1]

Table III-D-2: Performance Testing Requirements for Turbine Units 5 through 8

Test Point	Pollutant	Method (40 CFR 60, Appendix A)	Frequency
Turbine/HRSG Exhaust Stack	NO _x	Chemiluminescence Analyzer (EPA Method 7E)	Every 5 years
Turbine/HRSG Exhaust Stack	CO	EPA Method 10 analyzer	Every 5 years

Test Point	Pollutant	Method (40 CFR 60, Appendix A)	Frequency
Turbine/HRSG Exhaust Stack	VOC	Flame Ionization Analyzer (EPA Method 25a)	Every 5 years
Turbine/HRSG Exhaust Stack	PM ₁₀	EPA Method 5/202 or 201a/202	Every 5 years – Annually for Unit 7
Stack Gas Parameters	---	EPA Methods 1, 2, 3, 4	Every 5 years

6. The baghouses must be performance tested for PM₁₀ to determine capture efficiency within 500 hours of use after November 2, 2003. The baghouses shall thereafter be performance tested after each 8,760 hours of use. Table III-D-3 summarizes PM₁₀ performance test methods for all baghouses. [AQR 19.4.3.1]

Table III-D-3: Performance Testing Requirements for Baghouses

Test Point	Pollutant	Method (40 CFR 60, Appendix A)	Frequency
Baghouse Exhaust Stack	PM ₁₀	EPA Method 5	Every 8,760 hours of use

E. RECORD KEEPING

1. Records and data required by this permit to be maintained by the Permittee may, at the Permittee's expense, be audited at any time by a third party selected by the Control Officer. [AQR 4.4 and 19.4.3.2]
2. All records and logs, or a copy thereof, shall be kept on site for a minimum of five years from the date the measurement was taken or data was entered and shall be made available to DAQEM upon request. [AQR 19.4.1.3(b)]
3. The Permittee shall comply with all applicable record keeping requirements of 40 CFR 60.7, 40 CFR 60 Subpart GG, and 40 CFR 63 Subpart CCCCC. The Permittee shall maintain records on-site that include, at a minimum:
 - a. the magnitude and duration of excess emissions, notifications, monitoring system performance, malfunctions and corrective actions, taken as required by 40 CFR 60.7;
 - b. CEMS audit results or accuracy checks, and corrective actions, as required by 40 CFR 60 and the CEMS Quality Assurance Plan;
 - c. monthly CEMS NO_x and CO data;
 - d. dates and hours of operation of each emission unit except EU A43;
 - e. dates, times and duration of each turbine startup and shutdown event;
 - f. annual emissions per turbine, including startup, shutdown and normal operations, in tons per 12-month rolling total;

- g. monthly and 12-month rolling total quantity of natural gas consumed in each gas turbine;
 - h. monthly and 12-month rolling total throughput of the lime silo and each soda ash silo;
 - i. daily TDS content of tower circulation water when operating;
 - j. monthly and 12-month rolling total hours of operation of, and quantity of diesel fuel consumed in, each of the diesel generators and fire pump for testing and maintenance purposes and a separate log for operation during emergencies;
 - k. sulfur content of natural gas;
 - l. sulfur content of diesel fuel as certified by the supplier;
 - m. monthly and 12-month rolling total gasoline throughput pursuant to 40 CFR 63.11116(b);
 - n. log of visible emission checks; and
 - o. results of performance testing. [AQR 19.4.1.3(b)]
4. For all inspections, visible emission checks, and testing required under monitoring, logs, reports, and records shall include at least the date and time, the name of the person performing the action, the results or findings, and the type of corrective action taken (if required). [AQR 19.4.1.3(b)]
 5. Should this stationary source, as defined in 40 CFR 68.3, become subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit an RMP by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR 70 or 71. [AQR 19.4.1.3]

F. REPORTING

1. The Permittee shall comply with all notification, record keeping and reporting requirements of 40 CFR 60.7, 40 CFR 60 Subpart GG,. [AQR 19.4.1.3 and NSR ATC/OP Modification 4 Revision 1, Condition IV-I-1 (03/20/07)]
2. The Permittee shall submit quarterly monitoring report, compliance certifications and emission inventories as specified in table IV-F-1 [AQR 19.4.1.3]
3. Each quarterly report shall [AQR 19.4.1.3]:
 - a. include, as the first page of text, a signed certification containing the sentence, "I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate and complete." This statement shall be signed and dated by a responsible official of the company;
 - b. include quarterly summaries of items listed in Condition III-E-3-a through I;

- c. include quarterly summaries of any permit deviations, their probable cause and corrective actions or preventative actions taken;
 - d. be based on the calendar quarter, including partial calendar quarters;
 - e. be submitted within 30 days after the end of the calendar quarter; and
 - f. be addressed to the attention of the Control Officer. [AQR 19.4.1.3]
4. Regardless of the date of issuance of this permit, the schedule for the submittal of reports to the Control Officer shall be as follows [AQR 19.4.1.3]:

Table IV-F-1: Reporting Schedule

Quarter	Applicable Period	Due Date ¹	Required Contents
--	Calendar Year	February 28 each year	Annual Emission Inventory Report
1	January, February, March	April 30 each year	Quarterly Report for 1st Calendar Quarter
2	April, May, June	July 30 each year	Quarterly Report for 2nd Calendar Quarter
--	Calendar Year	30 days after permit issuance each year	Annual Compliance Certification Report
3	July, August, September	October 30 each year	Quarterly Report for 3rd Calendar Quarter
4	October, November, December	January 30 each year	Quarterly Report for 4th Calendar Quarter

¹ If the due date falls on a Saturday, Sunday or legal holiday, then the submittal is due on the next regularly scheduled business day.

- 5. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements and requirements of applicable regulations. [AQR 4.4 and 19.4.1.3]
- 6. The Permittee shall submit an annual emissions inventory by March 31 to the Control Officer and shall include the emission factors and calculations used to determine the emissions from each permitted emission unit, even if that unit was not operated. [AQR 18.6.1 and 19.4.1.3]
- 7. The Permittee shall notify the Regional Administrator (EPA) by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in these conditions. In addition, the Permittee shall notify the Regional Administrator in writing within fifteen days of any such failure. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any

violations of this permit or of any law or regulations which such malfunction may cause. (Turbine Units 7 and 8 only). [AQR 19.4.1.3]

8. The Permittee shall maintain and report the compliance data quarterly. If the hourly emissions exceed the hourly allowable limit, determine the cause, correct the cause and report the incident to DAQEM within one hour of the incident. [AQR 19.4.1.3 and 40 CFR 70.6]

G. MITIGATION

The source has no federal offset requirements. [AQR 59.1.1]

IV. OTHER REQUIREMENTS

1. The Permittee shall not use, sell, or offer for sale any fluid as a substitute material for any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator freezer unit, or other cooling or heating device designated to use a chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC) compound as a working fluid, unless such fluid has been approved for sale in such use by the Administrator. The Permittee shall keep record of all paperwork relevant to the applicable requirements of 40 CFR 82 on site. [40 CFR 82]
2. In compliance with the requirements of the Consent Decree, the Permittee shall comply with the following schedule.

Table IV-1: Consent Decree NO_x Reductions and Controls Requirements

Requirement	Date Required
The Permittee shall operate Turbine Units 5 through 8 in accordance with the water-to-fuel ratio curves approved by EPA excluding periods of startup and shutdown	30 calendar days after lodging of the Consent Decree
The Permittee shall record actual water-to-fuel ratio on a 3-hour average basis using a CEMS DAHS	30 calendar days after lodging of the Consent Decree
The Permittee shall cease operating water injection on a Turbine Unit when a ULNB commences operation on that unit	Variable
The Permittee shall commence operation of ULNB on Turbine Unit 5	12/31/08
The Permittee shall commence operation of ULNB on Turbine Unit 6	12/31/09
The Permittee shall commence operation of ULNB on Turbine Unit 7	12/31/09
The Permittee shall commence operation of ULNB on Turbine Unit 8	12/31/08
The Permittee shall achieve a 5 ppm NO _x Emission Rate on a 1-hour average on Turbine Unit 5 (excluding startup and shut down)	1/30/09

Requirement	Date Required
The Permittee shall achieve a 5 ppm NO _x Emission Rate on a 1-hour average on Turbine Unit 6 (excluding startup and shut down)	1/30/10
The Permittee shall achieve a 5 ppm NO _x Emission Rate on a 1-hour average on Turbine Unit 7 (excluding startup and shut down)	1/30/10
The Permittee shall achieve a 5 ppm NO _x Emission Rate on a 1-hour average on Turbine Unit 8 (excluding startup and shut down)	1/30/09
The Permittee shall use a CEMS to record NO _x Emission Rates on Turbine Unit 5 and report the emissions in one hour averages	1/30/09
The Permittee shall use a CEMS to record NO _x Emission Rates on Turbine Unit 6 and report the emissions in one hour averages	1/30/10
The Permittee shall use a CEMS to record NO _x Emission Rates on Turbine Unit 7 and report the emissions in one hour averages	1/30/10
The Permittee shall use a CEMS to record NO _x Emission Rates on Turbine Unit 8 and report the emissions in one hour averages	1/30/09

V. PERMIT SHIELD

1. It is the Permittee's responsibility to satisfy all federal requirements to which the source is subject. [AQR 19.4.1.6a]
2. Compliance with the terms contained in this permit shall be deemed compliance with the following applicable requirements in effect on the date of permit issuance:

Table V-1: Applicable Requirements Related to Permit Shield

Citation	Title
AQR Section 0 [amended 10/7/04]	Definitions
AQR Section 4 [amended 7/1/04]	Control Officer
AQR Section 11 [amended 7/1/04]	Ambient Air Quality Standards
AQR Section 12.1 [amended 10/7/04]	General application requirements for construction of new and modified sources of air pollution
AQR Section 12.2.2 [amended 10/7/04]	Requirements for specific air pollutants: PM ₁₀ emission source located in the Serious Non-Attainment Area
AQR Section 12.2.7 [amended 10/7/04]	Requirements for specific air pollutants: CO sources located in the Serious Non-Attainment Area
AQR Section 12.2.12 [amended 10/7/04]	Requirements for specific air pollutants: VOC sources located in the Management Area
AQR Section 12.2.14 [amended 10/7/04]	Requirements for specific air pollutants: NO _x sources located in the Management Area
AQR Section 12.2.16	Requirements for specific air pollutants: SO ₂ sources located in the PSD

Citation	Title
[amended 10/7/04]	area
AQR Section 12.2.19 [amended 10/7/04]	Requirements for specific air pollutants: TCS sources in Clark County
AQR Section 12.5 [amended 10/7/04]	Air Quality Models
AQR Section 12.7 [amended 10/7/04]	Continuous Emission Monitoring (CEM) Systems
AQR Section 14.1.1 Subpart A [amended 7/1/04]	New Source Performance Standards (NSPS) General Provisions
AQR Section 18 [amended 1/27/09]	Permit and Technical Service Fees
AQR Section 19 [amended 7/1/04]	40 CFR Part 70 Operating Permits
AQR Section 25 [amended 7/1/04]	Upset/Breakdown, Malfunctions
AQR Section 26 [amended 7/1/04]	Emissions of Visible Air Contaminants
AQR Section 28 [amended 7/1/04]	Fuel Burning Equipment
AQR Section 29 [amended 7/1/04]	Sulfur Content of Fuel Oil
AQR Section 40 [amended 7/1/04]	Prohibition of Nuisance Conditions
AQR Section 41 [amended 7/1/04]	Fugitive Dust
AQR Section 42 [amended 7/1/04]	Open Burning
AQR Section 43 [amended 7/1/04]	Odors in the Ambient Air
AQR Section 55 [adopted 12/21/04]	Preconstruction review for New or Modified Stationary Sources in the 8-Hour Ozone Nonattainment Area
AQR Section 70.4 [amended 7/1/04]	Emergency Procedures
40 CFR Part 52.21	Prevention of Significant Deterioration (including Pre-construction permits)
40 CFR Part 52.1470	SIP Rules
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources (NSPS) – General Provisions
40 CFR Part 60, Subpart GG	Standards of Performance for New Stationary Sources (NSPS) – Stationary Gas Turbines
40 CFR Part 60	Appendix A, Method 9 or equivalent, (Opacity)
40 CFR Part 60	Appendix A, Method 20 or equivalent
40 CFR Part 63	Subpart A – NESHAP – General Provisions
40 CFR Part 63	Subpart CCCCC – NESHAP Gasoline Dispensing Facilities
40 CFR Part 64	Compliance Assurance Monitoring
40 CFR Part 70	Federally Mandated Operational Permits

VI. ATTACHMENTS

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE:

Renewal Permit Issuance: **November 3, 2003**

1. Nevada Revised Statutes (NRS), Chapter 445B.
2. Clark County Air Quality Regulations Applicable Sections:

Citation	Title
AQR Section 0	Definitions
AQR Section 2	Air Pollution Control Board
AQR Section 4	Control Officer
AQR Section 5	Interference with Control Officer
AQR Section 6	Injunctive Relief
AQR Section 8	Persons Liable for Penalties – Punishment: Defense
AQR Section 9	Civil Penalties
AQR Section 10	Compliance Schedule
AQR Section 11	Ambient Air Quality Standards
AQR Section 12	Preconstruction Review for New or Modified Stationary Sources
AQR Section 12.5	Air Quality Models
AQR Section 18	Permit and Technical Service Fees
AQR Section 19	40 CFR Part 70 Operating Permits
AQR Section 20	Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP)
AQR Section 24	Sampling and Testing - Records and Reports
AQR Section 25	Upset/Breakdown, Malfunctions
AQR Section 26	Emissions of Visible Air Contaminants
AQR Section 28	Fuel Burning Equipment
AQR Section 29	Sulfur Contents of Fuel Oil
AQR Section 35	Diesel Engine Powered Electrical Generating Equipment
AQR Section 40	Prohibition of Nuisance Conditions
AQR Section 41	Fugitive Dust
AQR Section 42	Open Burning
AQR Section 43	Odors in the Ambient Air
AQR Section 55.5	Preconstruction review for New or Modified Stationary Sources in the 8-Hour Ozone Nonattainment Area
AQR Section 60	Evaporation and Leakage
AQR Section 70	Emergency Procedures
AQR Section 80	Circumvention
AQR Section 90	Fugitive Dust from Open Areas and Vacant Lots
AQR Section 91	Fugitive Dust from Unpaved Roads, Unpaved Alleys, and Unpaved Easement Roads
AQR Section 92	Fugitive Dust from Unpaved Parking Lots

3. Clean Air Act, as amended (CAAA), Authority: 42 U.S.C. § 7401, et seq.
4. Title 40 of the Code of Federal Regulations (40 CFR) Applicable Subsections:

Citation	Title
40 CFR 52.21	Prevention of Significant Deterioration (PSD)
40 CFR 52.1470	SIP Rules
40 CFR 60, Subpart A	Standards of Performance for New Stationary Sources (NSPS) – General Provisions
40 CFR 60, Subpart GG	Standards of Performance for New Stationary Sources (NSPS) – Stationary Gas Turbines
40 CFR 60	Appendix A, Method 9 or equivalent, (Opacity)

Citation	Title
40 CFR 63, Subpart A	National Emission Standards for Hazardous Air Pollutants for Source Categories – General Provisions
40 CFR 63, Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
40 CFR 70	Federally Mandated Operating Permits

PROPOSED